COMBINED OWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

As a below named inventor, I hereby

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

AUTOMATIC DYNAMIC SPEECH RECOGNITION VOCABULARY BASED ON EXTERNAL SOURCES OF INFORMATION the specification of which is attached hereto, unless the following box is checked:

as United States Application Number or PCT International Application Number 09/749,615 was filed on 28 December, 2000 and was amended on (if applicable).

I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to patentability as defined in 37 CFR § 1.56.

I hereby claim foreign priority benefit(s) under 35 U.S.C. § 119(a)-(d) or § 365(b) of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application(s) for patent or inventor's certificate having a filing date before that of the application on which priority is claimed.

Prior Foreign Application(s)	•		Priority Not Claimed
(Number)	(Country)	Day/Month/Year Filed	_ ⊔
(Number)	(Country)	Day/Month/Year Filed	
	as defined in 37 CFR § 1.56 which be	first paragraph of 35 U.S.C. § 112, I acknowle ecame available between the filing date of the paragraph.	•
(Application Serial No.)	(Filing Date)	(Status patented, pending, a	bandoned)
(Application Serial No.)	(Filing Date)	(Status patented, pending, a	bandoned)

I hereby appoint the attorneys and agents of Staas & Halsey LLP under USPTO Customer No. 21,171 and George J. Jakobsche, Reg. No. 39,236, Comverse Network Systems, Inc., 100 Quannapowitt Parkway, Wakefield, MA 01880, to prosecute this application and to transact all business in the Patent and Trademark Office connected therewith:



PATENT TRADEMARK OFFICE

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full name of sole or first inventor <u>Lawrence A. DENENBERG</u>		
Inventor's Signature	Date	
Residence Brookline, MA	Citizenship <u>USA</u>	
Post Office Address COMVERSE NETWORK SYSTEMS, 100 Quannapowitt Parkway, Wakefield, MA 01880, USA		
Full name of second joint inventor, if any Christopher M. SCHMANDT		
Inventor's Signature Chamber Europe	Date 30 Jan 2001	
Residence Winchester, MA	Citizenship <u>USA</u>	

Post Office Address COMVERSE NETWORK SYSTEMS, 100 Quannapowitt Parkway, Wakefield, MA 01880, USA

· UNITED STATES Page 2 of 2

COMBINED DECLARATION/POWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION



Full name of third inventor, if any Erin M. PANTTAJA		
Inventor's Signature	Date	
Residence Somerville, MA	Ci	itizenship <u>USA</u>
Post Office Address COMVERSE NETWORK SYSTEMS, 100 Quant	napowitt Parkway, Wakefield, MA	. 01880, USA
Full name of fourth inventor, if any		
Inventor's Signature	Date	
Residence	Ci	itizenship
Post Office Address		
Full name of fifth inventor, if any		
Inventor's Signature	Date	
Residence	Ci	itizenship
Post Office Address		
Full name of sixth inventor, if any		
Inventor's Signature	Date	
Residence	Ci	itizenship
Post Office Address		
Full name of seventh inventor, if any		
Inventor's Signature	Date	
Residence	Ci	itizenship
Post Office Address		
Full name of eighth inventor, if any		
Inventor's Signature	Date	
Residence	Ci	itizenship
Post Office Address		

COMBINED RECLARATION OWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

As a below named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated below next to my name.

I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed below) of the subject matter which is claimed and for which a patent is sought on the invention entitled:

	ECH RECOGNITION VOCABULARY hed hereto, unless the following box is	Y BASED ON EXTERNAL SOURCES OF INFORMATION
was filed on 28 December		Number or PCT International Application Number 09/749,615
and was amended on	(if applicable).	
referred to above. I acknowledge the duty to disclose	e information which is material to pater	
		r § 365(b) of any foreign application(s) for patent or inventor's certificate listed or inventor's certificate having a filing date before that of the application on which
Prior Foreign Application(s)		Priority Not Claimed
(Number)	(Country)	Day/Month/Year Filed
(Number)	(Country)	Day/Month/Year Filed
designating the United States, liste States or PCT International applica	ed below and, insofar as the subject ma tion(s) in the manner provided by the files as defined in 37 CFR § 1.56 which because	United States application(s), or § 365(c) of any PCT International application terror of each of the claims of this application is not disclosed in the prior Uniterst paragraph of 35 U.S.C. § 112, I acknowledge the duty to disclose information ame available between the filing date of the prior application and the national of
(Application Serial No.)	(Filing Date)	(Status patented, pending, abandoned)
(Application Serial No.)	(Filing Date)	(Status patented, pending, abandoned)
	mapowitt Parkway, Wakefield, MA 01	PTO Customer No. 21,171 and George J. Jakobsche, Reg. No. 39,236, Comvers 880, to prosecute this application and to transact all business in the Patent and
	PATENT TR	ADEMARK OFFICE
true; and further that these stater	nents were made with the knowledge tion 1001 of Title 18 of the United State	re true and that all statements made on information and belief are believed to be that willful false statements and the like so made are punishable by fine of es Code and that such willful false statements may jeopardize the validity of the
Full name of sole or first inventor	Lawrence A. DENENBERG	
Inventor's Signature		Date
Residence Brookline, MA		Citizenship <u>USA</u>
Post Office Address COMVERSI	E NETWORK SYSTEMS, 100 Quanna	apowitt Parkway, Wakefield, MA 01880, USA
Full name of second joint inventor	r, if any <u>Christopher M. SCHMANDT</u>	•
Inventor's Signature		Date
Residence Winchester, MA		Citizenship <u>USA</u>
Post Office Address COMVERSI	E NETWORK SYSTEMS, 100 Quanna	apowitt Parkway, Wakefield, MA 01880, USA

Additional inventors are being named on separately numbered sheets attached hereto.

UNITED STATE Page 2 of 2



COMBINED DECLARATION/POWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

rull name of third inventor, if any Erin M. PANTIAJA		
Inventor's Signature Can Wan Pantlage	Date _ 2/6	101
Residence Somerville, MA		Citizenship <u>USA</u>
Post Office Address COMVERSE NETWORK SYSTEMS, 100 Quannapowitt Par	kway, Wakefield,	MA 01880, USA
Full name of fourth inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		
Full name of fifth inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		
Full name of sixth inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		
Full name of seventh inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		
Full name of eighth inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		

COMBINED QECL POWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

As a below named inventor, I hereby declare that:

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I believe that I am the original, first and sole inventor (if only one name is listed below) or an original, first and joint inventor (if plural names are listed

	is claimed and for which a patent is CH RECOGNITION VOCABULAR	sought on the invention entitled: RY BASED ON EXTERNAL SOURCES OF INFORM	<u>MATION</u>
the specification of which is attach was filed on 28 December,	ed hereto, unless the following box is	s checked: on Number or PCT International Application Number	
and was amended on	(if applicable).	in Number of TeT international Application Number	
referred to above. I acknowledge the duty to disclose I hereby claim foreign priority ben-	and understand the contents of the abi information which is material to pate efit(s) under 35 U.S.C. § 119(a)-(d) of	ove-identified specification, including the claims, as amentability as defined in 37 CFR § 1.56. or § 365(b) of any foreign application(s) for patent or it or inventor's certificate having a filing date before that or	inventor's certificate listed
Prior Foreign Application(s)		Priorit	y Not Claimed
(Number)	(Country)	Day/Month/Year Filed	
(Number)	(Country)	Day/Month Feat Pried	0
(Number)	(Country)	Day/Month/Year Filed	
States or PCT International applicat	tion(s) in the manner provided by the state of the state	natter of each of the claims of this application is not dis first paragraph of 35 U.S.C. § 112, I acknowledge the di came available between the filing date of the prior appl	uty to disclose information
(Application Serial No.)	(Filing Date)	(Status patented, pending, abandoned	<u>, </u>
(Application Serial No.)	(Filing Date)	(Status patented, pending, abandoned	<u></u>
Network Systems, Inc., 100 Quant Trademark Office connected there	with:	21171	business in the Patent and
Thereby dealers that all statements		RADEMARK OFFICE	41-1-6
true; and further that these statem	nents were made with the knowledg on 1001 of Title 18 of the United Statereon.	are true and that all statements made on information an e that willful false statements and the like so made a stes Code and that such willful false statements may jec	are punishable by fine o
Inventor's Signature	sell Venubly	_ Date <u>2//3/0/</u>	
Residence Brookline, MA		Citizenship <u>USA</u>	
Post Office Address COMVERSE	NETWORK SYSTEMS, 100 Quant	napowitt Parkway, Wakefield, MA 01880, USA	
Full name of second joint inventor	, if any <u>Christopher M. SCHMAND</u>	<u>1</u>	
Inventor's Signature		Date	
Residence Winchester, MA		Citizenship <u>USA</u>	
Post Office Address COMVERSE	NETWORK SYSTEMS, 100 Quant	napowitt Parkway, Wakefield, MA 01880, USA	

Additional inventors are being named on separately numbered sheets attached hereto.

UNITED STATES Page 2 of 2



COMBINED DECLARATION/POWER OF ATTORNEY FOR UTILITY/DESIGN PATENT APPLICATION

Full name of third inventor, if any Erin M. PANTTAJA		
Inventor's Signature	Date	
Residence <u>Somerville, MA</u>		Citizenship <u>USA</u>
Post Office Address COMVERSE NETWORK SYSTEMS, 100 Quant	napowitt Parkway, Wakefiel	d, MA 01880, USA
Full name of fourth inventor, if any		
Inventor's Signature	_ Date	, _
Residence		Citizenship
Post Office Address		
Full name of fifth inventor, if any		
Inventor's Signature	_ Date	
Residence		Citizenship
Post Office Address		
Full name of sixth inventor, if any		
Inventor's Signature	_ Date	
Residence		Citizenship
Post Office Address		
Full name of seventh inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		
Full name of eighth inventor, if any		
Inventor's Signature	Date	
Residence		Citizenship
Post Office Address		